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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Thomas Stanley Seay

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EXAMINER

HUYNH, NAM TRUNG

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/725,873	Applicant(s) SEAY, THOMAS STANLEY	
	Examiner NAM HUYNH	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 and 34-40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,9-17,19-21,24-27 and 34-40 is/are rejected.
- 7) ☐ Claim(s) 3-5,8 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

qDETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 11/7/08. Of the previously presented claims 1-40; claims 16, 17, 18, 24, 25-27 have been amended and claims 28-33 have been cancelled.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2, 6, 7, 9-17, 19-21, 24-27, 34-36, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talaie et al. (US 2004/0018834) (hereinafter Talaie) in view of Gasbarro (US 2005/0032525).

Regarding claim 1, Talaie teaches a relay terminal (satellite) for relaying communication signals from originator user terminals to destination user terminals (figure 2), comprising:

means for storing relay-authorization-and-priority data for a plurality of said user terminals having respective identification codes (paragraphs 34, 35, and 37).

means for simultaneously receiving communication signals sent from a plurality of said originator terminals for relay to a plurality of said destination terminals that are identified in said received communication signals, wherein said received signals include identification codes for said originator terminals and identification codes for said identified destination terminals (paragraphs 27-33);

means for detecting said identification codes in said received communications signals (paragraphs 30, 35);

means for processing said detected identification codes in combination with said stored data to determine if immediate relaying (priority) of said received communication signals to respective said identified destination terminals is authorized (paragraphs 39, 40);

However, Talaie does not explicitly teach means for relaying said received communication signals immediately to only those of said identified destination terminals to which immediate relaying is authorized in accordance with said determination. Gasbarro discloses personal digital assistant having satellite communication capacity (title). Gasbarro teaches that a satellite relay may transmit data in accordance with priority wherein certain members have priority over other members (paragraph 60), thus

broadly teaching the transmission of messages based on a priority wherein a message transmitted by a member of highest priority would be transmitted immediately as opposed to a member of lower priority. Although Gasbarro teaches that priority is applied to the transmission of messages, it is obvious to one of ordinary skill in the art that the same concept can be applied to assigning a priority for receiving messages or transmissions. Therefore it would have been obvious to one of ordinary skill in the art to modify the invention of Talaie to include priority in receiving transmissions, as taught by Gasbarro, in order to allow members of high priority, such as leaders, to receive transmissions before general members. This modification would provide a more efficient way to route and schedule transmissions by the satellite.

Regarding claim 2, Talaie teaches means for updating said stored relay-authorization-and-priority data immediately in response to a received control message (paragraph 39).

Regarding claim 6, Gasbarro teaches further comprising: means for storing for delayed relay those received communication signals of which immediate relaying to respective said identified destination terminals is not authorized in accordance with said determination (paragraph 60).

Regarding claim 7, Talaie teaches means for recording data indicative of the performance of the relay terminal with respect to the timing of relaying said received communication signals in relation the time of receipt of the respective communication signals by the relay terminal (paragraph 35).

Regarding claims 9 and 15, Gasbarro teaches means for processing directional-position data associated with said destination terminals for defining beam paths for relaying signals to said destination terminals (paragraph 56).

Regarding claims 10, 11, and 34, Gasbarro teaches means for applying frequency-hopping patterns to said received communication signals for said relay of said communications signals;

means for storing a library of algorithms and parameters for executing a plurality of frequency-hopping patterns; and

means for selecting algorithms and parameters from said library that cause different frequency-hopping patterns to be applied for each simultaneous said receipt and relay of said communication signals (paragraph 56).

Regarding claims 12, 13, and 35, Gasbarro teaches the selecting means are adapted for causing respectively different said frequency-hopping patterns to be applied to acquisition, identification and payload segments of the relayed communication signals (paragraph 56).

Regarding claim 14, Gasbarro teaches the relaying means are adapted for simultaneously relaying a plurality of communications signals and for applying a different frequency-hopping pattern to each said simultaneously relayed communication signal (paragraph 56).

Regarding claim 16, Gasbarro teaches means for deriving directional-position data associated with a given said originator terminal from an acquisition segment of a

burst of a said communication signal received from a given said originator terminal (paragraph 62); and

means for immediately defining a beam path in accordance with said derived directional-position data to enable receipt of the remaining portion of said received signal burst within the formed defined beam path (paragraph 60).

Regarding claim 17, Gasbarro teaches means for transmitting an error-corrected version of said received signal burst back to said given originator terminal within the defined beam path (paragraph 56).

Regarding claim 19, Talaie teaches the receiving means are adapted for simultaneously receiving a plurality of communication signals within a plurality of distinct beam paths from a plurality of different originator terminals; and

wherein the relaying means are adapted for simultaneously relaying communications signals within a plurality of distinct beam paths to a plurality of different destination terminals (figure 2).

Regarding claim 20, Talaie teaches the receiving means include a plurality of receivers for respectively receiving said communication signals sent from said plurality of said originator terminals (figure 2).

Regarding claim 21, the limitations are rejected as applied to claim 1.

Regarding claim 24, the combination of Talaie and Gasbarro teaches a relay terminal for relaying communication signals from originator user terminals to identified destination user terminals, comprising:

means for receiving a given communication signal sent from a given said originator terminal for relay to one or more selected said destination terminals (Gasbarro paragraph 62);

means for deriving directional-position data associated with the given originator terminal by processing portions of the given signal received from the said originator terminal prior to detecting identification codes in the received signal (Gasbarro paragraphs 55, 57); and

means for processing the derived directional-position data associated with the given originator terminal to define a beam path for communications with the given originator terminal (Talaie paragraph 35).

Regarding claim 25, the combination of Talaie and Gasbarro teaches a relay terminal for relaying communication signals from originator user terminals to identified destination user terminals, comprising:

means for receiving a given communication signal sent from a given said originator terminal for relay to one or more selected said destination terminals (Gasbarro paragraph 62);

means for deriving directional-position data associated with the given originator terminal from an acquisition segment of a burst of said received given communication signal (Gasbarro paragraphs 55, 57); and

means for immediately defining a beam path in accordance with said derived directional-position data to enable receipt of the remaining portions of said received

signal burst within the formed defined beam path (Talaie paragraph 35; Gasbarro paragraph 60).

Gasbarro teaches means for transmitting an error-corrected version of said received signal burst back to said given originator terminal within the defined beam path (paragraph 56).

Regarding claim 27, the combination of Talaie and Gasbarro teaches a relay terminal for relaying communication signals from originator user terminals to identified destination user terminals, comprising:

means for simultaneously receiving communication signals sent from a plurality of said originator terminals for relay to a plurality of selected said destination terminals (Talaie figure 2);

means for deriving directional-position data associated with a plurality of said originator terminals from acquisition segments of bursts of respective said communication signals simultaneously received from a plurality of said originator terminals (Gasbarro paragraph 56);

means for defining respective beam paths in accordance with said derived directional-position data to enable receipt of the remaining segments of said received signal bursts within the respective defined beam paths (Gasbarro paragraph 56); and

means for transmitting error-corrected versions of said received signal bursts back to said plurality of originator terminals within said respective formed defined beam paths (Talaie paragraph 35).

Regarding claim 36, the limitations are rejected as applied to claims 34 and 35.

Regarding claim 38, the limitations are rejected as applied to claim 1.

Regarding claim 39, Gasbarro teaches the receivers are respectively adapted for receiving at least two different communications signals among one or more network-specific signals, common information signals, alert signals and paging signals; and

wherein the predetermined priority is established among the one or more network-specific signals, the common information signals, the alert signals and the paging signals (paragraph 60).

Regarding claim 40, Gasbarro teaches one of the receivers is adapted for receiving a given signal transmitted directly from another user terminal and another of the receivers is adapted for receiving said given signal relayed by a relay terminal (paragraph 33).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 37 is rejected under 35 U.S.C. 102(e) as being anticipated by Talaie et al (US 2004/0018834) (hereinafter Talaie).

Talaie teaches a communication network, comprising:

a plurality of user terminals for transmitting and receiving communication signals;
and

a relay terminal for relaying communication signals from one or more said user terminals to one or more said user terminals;

wherein individual said user terminals are adapted for simultaneously receiving both a given signal transmitted directly from another user terminal and said given signal relayed by said relay terminal (paragraph 23 and figure 2).

Allowable Subject Matter

6. Claims 22 and 23 are allowed.
7. Claims 3-5, 8, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1-27 and 34-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

NTH
2/26/09